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HEWLETT-PACKARD COMPANY  
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EXAMINER

NGUYEN, VAN H

ART UNIT PAPER NUMBER

2194

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/943,875

Applicant(s)

GENTRY ET AL.

Examiner

VAN H. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 35-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

### DETAILED ACTION

1. This Office Action is in response to the amendment filed December 19, 2005.

Claims 35-42 are pending in this application. Claims 1-34 have been cancelled.

#### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 36 and 40-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Pages 10-11 of Applicant's specification provide guidance as to what Applicant considers to fall within the scope of the phrase "computer-readable medium" as used in currently pending claims 36 and 40-42. The pertinent portion of pages 10-11 are as follows:

In the context of this document, a "computer-readable medium" can be any means that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device. The computer readable medium can be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. More specific examples (a nonexhaustive list) of the computer-readable medium would include the following: an electrical connection (electronic) having one or more wires, a portable computer diskette (magnetic), a random access memory (RAM) (electronic), a read-only memory (ROM) (electronic), an erasable programmable read-only memory (EPROM or Flash memory) (electronic), an optical fiber (optical), and a portable compact disc read-only memory (CDROM) (optical). Note that the computer-readable medium could even be paper or another suitable medium upon which the program is printed, as the program can be electronically captured, via for instance optical scanning of the paper or other medium, then

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compiled, interpreted or otherwise processed in a suitable manner if necessary, and then stored in a computer memory.

5. Thus it is clear that while Applicant has not provided an explicit and deliberate definition limiting the phrase “computer-readable medium,” Applicant has provided an explicit and deliberate definition of items Applicant intends to fall within the scope of “computer-readable medium.” Within this list of items are types of media which would have been recognized by one of ordinary skill at the time of the invention as storage media, propagation or transmission media, and printed matter. It is believed that the types of storage media listed by Applicant would have enabled the recited program logic, when stored thereon, to be read and executed by a computer and realize its functionality. It is not believed, however, that the recited propagation or transmission media would likewise enable the functionality to be realized. Absent recitation of some means for receiving and processing the program, propagation or transmission media are not believed to be, in and of themselves, capable of providing the program in a manner which enables it to be read and executed by a computer, with subsequent realization of its functionality to accomplish a practical application by causing the computer to perform operations with a useful, concrete and tangible result.

6. Certainly, Applicant’s inclusion of a piece of paper with the program printed thereon within the scope of “computer-readable medium” indicates the claims are sufficiently broad to read on non-functional descriptive material, printed matter. Printed matter which fails to be functionally interrelated to its substrate has long been held to be nonstatutory.

From MPEP 706.03(a):

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For example, a mere arrangement of printed matter, though seemingly a "manufacture," is rejected as not being within the statutory classes. See *In re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969); *Ex parte Gwinn*, 112 USPQ 439 (Bd. App. 1955); and *In re Jones*, 373 F.2d 1007, 153 USPQ 77 (CCPA 1967).

7. As such, claims 36 and 40-42 are not limited to embodiments which would enable execution of the program by a computer to realize its functionality and provide a practical application with a useful, concrete and tangible result. Note that any deletions from the specification may raise a question with respect to New Matter.

***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming, III** in view of **Momose** and further in view of **Udelstein et al.**

10. As to claim 35, Fleming teaches a method (*see the Abstract*) for installing a driver (*e.g., installs device driver software*) for a hardware device (*e.g., a device*) on a computer (*e.g., a computer system*), the method comprising:

determining if the hardware device is connected to the computer (*e.g., a detection mechanism that detects the presence of a device in a computer system; see the Abstract; col.2, lines 1-15, 21-24; and col.4, lines 54-64*); and

if it is determined that the device is connected to the computer, then installing the driver provided with the hardware device (*e.g., installs the current driver on the computer system; abstract; col.5, lines 25-33; and fig. 3*).

The detection mechanism of Fleming, however, is silent on “if it is determined that the device is not connected to the computer, then instructing a user to connect the hardware device to the computer.”

Momose teaches if it is determined that the device is not connected to the computer, then instructing a user to connect the hardware device to the computer (*e.g., see fig.11 and the warning dialogue box discussion beginning at col.10, line 13*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Momose with Fleming because Momose’s teachings would have notified the user when the device is not connected to the computer system, and prompted the user to connect the device to the computer system.

The combination of Fleming and Momose, however, does not specifically teach determining if an operating system on the computer includes a Windows installer service; if it is determined that the operating system does not include a Windows installer service, then removing any driver for the device provided by the operating system and setting up the operating system to use a driver provided with the device; if it is determined that the operating system includes a Windows installer service, then updating any driver for the device associated with the Windows installer service with a driver provided with the device.

Udelstein teaches determining if an operating system (*e.g., the operating system*) on the computer (*e.g., the target computer system*) includes a Windows installer service

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(e.g., a *WINDOWS INSTALLER* program module); if it is determined that the operating system does not include a Windows installer service (e.g., *operable to detect*), then removing any driver for the device provided by the operating system and setting up the operating system to use a driver provided with the device (e.g., *dynamically creating or modifying an install-set*); if it is determined that the operating system includes a Windows installer service, then updating any driver for the device associated with the Windows installer service with a driver provided with the device (e.g., *The installation program module 137 is operable to determine which of the components 136a-g are to be included in the install-set, i.e., the set of components that are to be installed onto target computer system 120. The install-set typically includes all required components and any optional components that are determined by the installation program module 137 to be appropriate for installation onto the target computer system 120*) [see col.6, line 24-col.7, line 15].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Udelstein with Fleming as modified by Momose because Udelstein's teaching would have provided the capability for dynamically creating and modifying an install-set, without user interaction, to accommodate the needs of an individual user and/or the requirements of an individual computer system.

11. As to claim 37, Fleming teaches acquiring the driver provided with the hardware device from a network source (e.g., *the driver retrieving mechanism is configured to send an identifier for the computer system to the remote host so that the remote host can return a version of the current driver that is tailored to the computer system*; col. 2, lines 43-

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*47/the system retrieves current driver 116 from server 112 across net work 111; col. 5, lines 14-24 and fig. 3).*

12. As to claims 36 and 40, note the rejection of claims 35 and 37 respectively.

Claims 36 and 40 are the same as claims 35 and 37, except claims 36 and 40 are computer readable medium claims and claims 35 and 37 are method claims.

13. Claims 38, 39, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming** in view of **Momose** and **Udelstein et al.** as applied to claims 35 and 36 above and further in view of **Nykanen et al.**

14. As to claim 38, the combination as applied to claim 35 above does not specifically teach determining which of a plurality of hardware device instances connected to the computer system are to be removed from the computer system; and removing from a device object the hardware device instances determined to be removed from the computer system.

Nykanen teaches determining which of a plurality of hardware device instances connected to the computer system are to be removed from the computer system; and removing from a device object the hardware device instances determined to be removed from the computer system (*e.g., see the removing of devices discussion, beginning at col.7, line 39. See also figs. 5a-5c*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the teaching of Nykanen to the combined references above because Nykanen's teaching would have provided the capability for detecting and



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identifying the devices connected to the computer system, and removing the unused devices in the computer system. Therefore, facilitating the installation of the driver on the computer system.

15. As to claim 39, the combination as applied to claim 35 above does not specifically teach removing any shortcut for the hardware device instances that are determined to be removed from the computer system.

Nykanen teaches removing any shortcut for the hardware device instances that are determined to be removed from the computer system (*e.g., see the removing of icon discussion, beginning at col.7, line 30*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the teaching of Nykanen to the combined references above because Nykanen's teaching would have provided the capability for removing an icon associated with an inactivated device in a computer system.

16. As to claims 41 and 42, note the rejection of claims 38 and 39, respectively. Claims 41 and 42 are the same as claims 38 and 39, except claims 41 and 42 are computer readable medium claims and claims 38 and 39 are method claims.

### ***Response to Applicant's Arguments***

17. Applicant argues that the claims are statutory because they are directed to a computer readable medium and that, "computer readable medium is statutory subject matter. This broad-based conclusion lacks support in the court cases cited. A computer

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readable medium carrying instructions which when executed impart functionality to a computer to cause the computer to perform a practical application with a useful, concrete and tangible result is statutory subject matter.

In this instance, when read in light of Applicant's specification, the claims cover some embodiments where the computer readable medium carries instructions in an executable manner so as to cause such functionality to occur, and they cover nothing more than a piece of paper. Contrary to Applicant's erroneous assertion, the examiner is not reading limitations into the claims from the specification. The examiner is in no way indicating that the computer readable medium is limited solely to the specifically mentioned examples in Applicant's specification. Any equivalents thereto would be established by what is known to those of ordinary skill in the art. Instead, the examiner is basing the rejection on the indisputable fact that Applicant's specification provides clear evidence that Applicant intends for the computer readable medium claims to cover a piece of paper. As indicated in the rejection itself, the courts have long held that a mere arrangement of printed matter, though seemingly a "manufacture," is not patent-eligible. As such, Applicant's arguments are not persuasive. Applicant is again reminded that any changes to the original disclosure, including deletions from the specification, would raise the issue of New Matter.

18. Applicant argues that Edelstein does not make any determination that the operating system does or does not include a Windows installer... Edelstein doesn't have anything to do with device drivers. Contrary to Applicant's contention, Edelstein teaches determining if an operating system (*e.g., the operating system*) on the computer (*e.g., the target computer system*) includes a Windows installer service (*e.g., a*

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*WINDOWS INSTALLER program module*); if it is determined that the operating system does not include a Windows installer service (*e.g., operable to detect*), then removing any driver for the device provided by the operating system and setting up the operating system to use a driver provided with the device (*e.g., dynamically creating or modifying an install-set*); if it is determined that the operating system includes a Windows installer service, then updating any driver for the device associated with the Windows installer service with a driver provided with the device (*e.g., The installation program module 137 is operable to determine which of the components 136a-g are to be included in the install-set, i.e., the set of components that are to be installed onto target computer system 120. The install-set typically includes all required components and any optional components that are determined by the installation program module 137 to be appropriate for installation onto the target computer system 120*) [see col.6, line 24-col.7, line 15].

19. Applicant's arguments have been fully considered but are deemed to be unpersuasive. For the reasons detailed above, the rejections are maintained as set forth supra.

### ***Conclusion***

20. The prior art made of record, see PTO 892, and not relied upon is considered pertinent to applicant's disclosure. Applicant should review these references carefully before responding to this office action.

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

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time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

22. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765.

The examiner can normally be reached on Monday-Thursday from 8:30AM 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or

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proceeding is assigned is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

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